

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
TYLER DIVISION

COMMONWEALTH SCIENTIFIC AND)
INDUSTRIAL RESEARCH)
ORGANISATION, INC.) DOCKET NO. 6:06cv324

-vs-

)
) Tyler, Texas
BUFFALO TECHNOLOGY, INC.,) April 16, 2009
ET AL) 5:00 p.m.

MICROSOFT CORPORATION, ET AL)
) DOCKET NO. 6:06cv549

-vs-

)
)
COMMONWEALTH SCIENTIFIC AND)
INDUSTRIAL RESEARCH)
ORGANISATION, INC.)

COMMONWEALTH SCIENTIFIC AND)
INDUSTRIAL RESEARCH)
ORGANISATION, INC.) DOCKET NO. 6:06cv550

-vs-

)
)
TOSHIBA AMERICA, ET AL)

INTEL CORPORATION, ET AL)
) DOCKET NO. 6:06cv551

-vs-

)
)
COMMONWEALTH SCIENTIFIC AND)
INDUSTRIAL RESEARCH)
ORGANISATION, INC.)

TRANSCRIPT OF BENCH TRIAL
BEFORE THE HONORABLE LEONARD DAVIS,
UNITED STATES DISTRICT JUDGE

A P P E A R A N C E S

(SIGN-IN SHEETS DOCKETED IN EACH CASE)

COURT REPORTERS: MS. KIMBERLY JULIAN
MR. D. KEITH
JOHNSON

CURRY JOHNSON JULIAN, INC.
CERTIFIED SHORTHAND REPORTERS
P.O. BOX 270
TYLER, TEXAS 75710

PROCEEDINGS REPORTED BY MECHANICAL STENOGRAPHY,
TRANSCRIPT PRODUCED BY COMPUTER-AIDED TRANSCRIPTION.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

P R O C E E D I N G S

(Following at close of jury trial:)

THE COURT: All right. Very well. Who will be your witness with regard to the RAND defenses?

MR. VAN NEST: Your Honor, can the non-RAND counsel be excused for the day?

THE COURT: I don't know.

MR. MIKE JONES: Just say no, Your Honor.

THE COURT: No.

MR. MIKE JONES: Your Honor, he was waiting in my office, and if we can run to get him. He'll be here just like this. I was just notified a minute ago of the change of plans, and we've got him on his way here.

THE COURT: All right. I would like non-RAND counsel to stay this afternoon, seriously.

MR. MIKE JONES: Okay. Yes, sir.

THE COURT: It won't be long, Mr. Jones promised me. And we both mean that sincerely, I know.

All right. I'm going to be in recess until he gets here.

(Recess.)

THE COURT: All right. Has this witness been sworn?

MR. VASQUEZ: No, he hasn't, Your Honor.

1 THE COURT: All right. Raise your right
2 hand and be sworn.

3 (Witness sworn.)

4 THE COURT: All right.

5 DEAN KAWAGUCHI,
6 Having been duly sworn, testified as follows:

7 DIRECT EXAMINATION

8 BY MR. VASQUEZ:

9 Q Good afternoon, Mr. Kawaguchi. Please state
10 your name.

11 A Dean Kawaguchi.

12 Q And where do you live?

13 A San Jose, California.

14 Q What is your current employment?

15 A I work for Intellex Corporation.

16 Q And how long worked for Intellex?

17 A A little over three years.

18 Q What does Intellex do?

19 A We do RFID tags and meters, radio frequency
20 identification.

21 Q Can you explain what RFID is?

22 A Sure. It is very low-cost chips that enable
23 wireless tracking of products, identification of
24 inventory, assets, cattle, anything.

25 Q Okay. Before you got into RFID, were you also

1 involved in the wireless industry?

2 A Yes, I was.

3 Q For how many companies did you work in the
4 wireless industry before Intellex?

5 A Two before Intellex.

6 Q And what was the first one?

7 A The first one was TRW Incorporated in Redondo
8 Beach. I started there in 1983 and worked there for ten
9 years, working on wireless communication satellite
10 systems.

11 Q Okay. What's your educational background?

12 A I have a BSEE from the University of
13 Washington, received that in 1983, and an MSEE in --
14 from the University of Southern California. Both of
15 them were specializing in communication theory and
16 signal processing.

17 Q Okay. And what was your next employment after
18 TRW?

19 A I worked for Symbol Technologies in 1993.

20 Q Okay. And did you work on any 802.11
21 projects?

22 A Yes. That was what I was hired in for, was to
23 work on pre-802.11, which then became 802.11 wireless.

24 Q Okay. Thank you. While at Symbol, was it
25 part of your job to work in any professional

1 associations?

2 A Yes. Part of my job was to attend the IEEE
3 802.11 standards meeting, which I did from 1993.

4 Q For how long did you attend those meetings?

5 A Approximately seven years that I went
6 full-time.

7 Q Okay. How frequently?

8 A That would be six times a year, since we met
9 every two months.

10 Q What committees were you involved in?

11 A Primarily in the physical layer group, the
12 frequency hopping, phy ad hoc group. I also went to the
13 general meetings, the Mac layer meetings, and I also
14 participated in the 802.11a, 11b task groups.

15 Q Were you selected for any leadership posts?

16 A Yes, I was.

17 Q Okay. Can you identify those for us.

18 A Yes. The physical layer subgroup, the
19 frequency hopping, phy ad hoc group, and I was asked to
20 chair -- if I wanted to chair one of the 11a or 11b task
21 groups. I declined, but I agreed to be a substitute
22 chair for 802.11a.

23 Q And when you were the substitute chair, did
24 the 802.11a committee do the voting to get to the final
25 standard?

1 A Yes, they did.

2 Q Okay. Can you please take a look at
3 Exhibit 283.

4 MR. VASQUEZ: And, Your Honor, in advance
5 of the examination, counsel for both sides agreed to
6 admit Exhibits 124, 283 and 853.

7 MR. FURNISS: Yes, Your Honor, that's
8 true. The first and the third were already in, and
9 there's no objection to the middle one, 283.

10 THE COURT: Be admitted.

11 Q (By Mr. Vasquez) Do you recognize Exhibit 283?
12 That's going to come up on the screen. Meanwhile, I'll
13 give you the paper copy.

14 MR. VASQUEZ: May I approach the witness,
15 Your Honor?

16 THE COURT: Yes, you may.

17 A Yes, I do.

18 Q (By Mr. Vasquez) Okay. And what is it?

19 A It is a summary of the proposals that were
20 being considered for the 802.11a physical layer.

21 Q And what -- at what meeting were these
22 proposed?

23 A This was in the January 1988 meeting.

24 Q And where was that meeting?

25 A Let's see. I'm not -- I can't --

1 Q It says Lynnwood, Washington, in the first
2 line?

3 A Okay. Lynnwood, Washington.

4 Q And you were present?

5 A Yes, I was.

6 Q And you were the chair that?

7 A Let's see. I was chair on some of the
8 meetings. If the permanent chair was not presenting on
9 his proposal, then he would take over back as chair.

10 Q Now, before the "a" standard, was there a
11 predecessor standard?

12 A Yes. There was the original 802.11 standard.

13 Q And what was the characteristics of that
14 standard?

15 A Well, we had a Mac, media access control,
16 layer and three physical layers, frequency hopping, phy
17 and direct sequence phy, back at 2.4 gigahertz, and an
18 infrared phy.

19 Q Okay. When was 802.11, the first standard,
20 completed?

21 A In July of 1997.

22 Q Okay. And during the entire process of
23 developing that first standard, did you ever hear
24 anything about CSIRO?

25 A No, I did not.

1 Q Did CSIRO make any proposals for the first
2 standard?

3 A No, they did not.

4 Q Okay. Now, speaking to the "a" standard,
5 particularly the exhibits that you have here, what is
6 this comparison proposals chart?

7 A Well, it is the six proposals that were being
8 considered at this point, and some of the key
9 characteristics.

10 Q Okay. The list -- these list them by
11 companies; is that right?

12 A Yes.

13 Q And that's the company associated with the
14 proposals, correct?

15 A That's correct.

16 Q Okay. The first one says Lucent Technology.
17 Who is Lucent Technology?

18 A Lucent was part of the break-up of AT&T. And
19 it included the Bell Laboratories, which is a noted
20 group in wireless communication, or in all
21 communications. But they had also purchased a group in
22 the Netherlands called NCR Wireless. And this was the
23 group that was presenting this particular proposal.

24 Q Were they known as the U-Trip group
25 (phonetics)?

1 A Yes.

2 Q And the U-Trip group was responsible for the
3 Lucent proposal; is that correct?

4 A That's correct. That was the wireless LAN
5 group.

6 Q Does Lucent have any connection to CSIRO?

7 A Not that I know of.

8 Q Does it have any connection to Radiata?

9 A Not that I know of.

10 Q Okay. Now, can you tell us where the
11 technology from the Lucent proposal emanated from?

12 A Yeah. To my knowledge, there were two efforts
13 going on in Europe prior to the 802.11a. One was the
14 DVBT standard and the other one was the Magic Wand
15 project.

16 Q What is DVBT?

17 A It is Digital Video Broadcast Terrestrial.

18 Q And what's it used for?

19 A It's used to transmit digital TV signals from
20 regular radio towers, as opposed to DirecTV's
21 transmissions from satellites.

22 Q Similar to the DirecTV satellite system, but
23 it comes from broadcast -- from terrestrial towers?

24 A That's correct.

25 Q Okay. Did it use OFDM as a modulation scheme?

1 A Yes, it did.

2 Q Was it part of the Lucent presentation, this
3 was kind of a successful way to use OFDM?

4 A That was part of their basis for presenting
5 OFDM as a viable candidate.

6 Q Did they also mention the Magic Wand project?

7 A Yes, they did.

8 Q And what was the Magic Wand project?

9 A That was a consortium between several
10 universities and companies in Europe that were working
11 on an OFDM-based wireless ATM demonstration.

12 Q What was the intent of that project?

13 A Well, basically to develop an equivalent to
14 what would be the fiber backbone on data networks, for
15 example, between cities where you couldn't apply fiber
16 as the carrier; you could apply wireless.

17 Q Was that considered a successful demonstration
18 of OFDM used in this type of technology?

19 A Yes. I believe it was.

20 Q Okay. Now, so let's cover some of the
21 principles that were present in Lucent Technology
22 proposal.

23 Was this an OFDM-based proposal?

24 A Yes, it was.

25 Q Did it use convolutional coding for forward

1 error correction?

2 A Yes, it did.

3 Q Did it also use interleaving?

4 A Yes, it did, across carriers.

5 Q Was there a second OFDM proposal on this list?

6 A Yes, there was.

7 Q By whom?

8 A NTT, Nipon Telephone and Telegraph. Basically
9 and AT&T of Japan.

10 Q And did their proposal, besides using OFDM,
11 did it use convolutional coding for forward error
12 correction?

13 A Yes, it did.

14 Q Did it also use interleaving?

15 A Yes, it did.

16 Q And then of the remaining proposals, Micrilor,
17 NEC, BreezeCom and RadioLAN, were any of them OFDM-based
18 proposals?

19 A No. They were all various forms of
20 single-carrier proposals.

21 Q Okay. Now, at some point, was there a vote to
22 determine which of these six proposals would be the
23 ultimate 802.11a standard-bearer?

24 A Yes.

25 Q Okay. And how was that voting process done?

1 A Well, it was a down-selection process. So at
2 each voting round, we would eliminate the lowest vote,
3 similar to American Idol, getting rid of the one with
4 the lowest votes there.

5 Q So you have a six-pack vote, and then a
6 five-pack, on down to a one?

7 THE COURT: Was there a save provision?
8 (Laughter.)

9 THE WITNESS: There were no popular --

10 Q (By Mr. Vasquez) Okay. Now, at 6-to-1 odds,
11 did any of these proposals decide to alter their
12 proposals or join forces with the other in an effort to
13 succeed?

14 A Yes. Four of the companies combined into two
15 separate proposals. So it went from six down to four.

16 Q Which companies combined a single-carrier
17 proposal?

18 A That would be NEC and BreezeCom.

19 Q Did any of the OFDM companies combine?

20 A Yes. Lucent and NTT combined to create one
21 joint proposal.

22 Q Okay. We've heard NTT in this trial before.
23 Who was the leader of NTT?

24 A I believe the prime presenter was Hitoshi
25 Takanashi.

1 Q Okay. Did NTT have any relationship to CSIRO?

2 A Not to my knowledge.

3 Q Any relationship to Radiata?

4 A Not to my knowledge.

5 Q Just to make clear, you were personally aware
6 of the proposals made by Lucent and NTT had no
7 connection to either CSIRO or Radiata, correct?

8 A That's correct.

9 Q Okay. Let's look at Exhibit 124, if you
10 would. Do you recognize 124, sir?

11 A Yes, I do.

12 Q What is it?

13 A It is the minutes from the meeting in Ulrecht,
14 Netherlands, in May of 1998.

15 Q That was the meeting in the Lucent Wireless
16 Group's backyard?

17 A Yes. They were the host. That was their
18 office location.

19 Q Were you present?

20 A Yes, I was.

21 Q And you attended these meetings?

22 A Yes, I did.

23 Q Were you chairing the 802.11a at the time?

24 A Yes. I believe I chaired most of this
25 particular session.

1 Q So is there a section in here where you
2 recorded the vote results of the election, the American
3 Idol election, that took place after the combined
4 proposals?

5 A Yes.

6 Q Okay. Where is that located? Is that section
7 2.4?

8 A That would be in -- on page -- at the top of
9 that page.

10 Q Okay. So it says BreezeCom, Lucent, RadioLAN
11 or none. It was a three -- the object of the vote was
12 to drop out the third place?

13 A The lowest vote, right.

14 Q And who one the most votes in that vote?

15 A BreezeCom won -- BreezeCom/NEC proposal won
16 the most votes in that round.

17 Q That was the single-carrier proposal?

18 A That was.

19 Q And Lucent got second?

20 A That's correct.

21 Q With NTT, correct?

22 A Right.

23 Q So why didn't BreezeCom, the single-carrier
24 solution, become the 802.11a standard after that vote?

25 A Well, in order to win the standard, you have

1 to have at least 75 percent. But the primary goal of
2 this round was to eliminate the -- from three down to
3 two.

4 Q Okay. So you were the chair. What happened
5 next in this voting process?

6 A So we then proceeded on to the next round of
7 voting, which is from two to one proposal.

8 Q Okay. And is that reflected under 2.6?

9 A That's correct.

10 Q Okay. And what were the vote tallies in that
11 by percentage?

12 A Well, Lucent/NTT had a majority with
13 53.4 percent. BreezeCom 41.4 percent.

14 Q Okay. So what do the rules dictate occur when
15 you have a 53 but not 75 percent?

16 A Well, we were down selecting from two to one.
17 So BreezeCom/NEC proposal was eliminated.

18 Q Did that make it the standard?

19 A Not yet, because it still didn't have
20 75 percent.

21 Q Okay. So what was the process of determining
22 whether you can arrive with 75 percent in the favor of
23 the standard?

24 A Well, we had another round of questions and
25 answers to try and resolve the remaining issues that was

1 keeping it from getting to 75 percent.

2 Q Okay. And basically the committee members
3 could ask anything they want?

4 A That's correct, within bounds.

5 Q Okay. Anything pertaining to the object of
6 the vote?

7 A Yes.

8 Q What were the considerations by the committee?
9 What were the criteria that was proposed and discussed?

10 A Well, the criteria for comparison was into two
11 different categories. One is performance. The other
12 one is cost. We want the best possible performance for
13 the lowest possible cost.

14 Q Okay. Now, are you familiar, as chair, with
15 the IEEE patent policy?

16 A Yes, I am.

17 Q Did the IEEE rely upon the use of letters of
18 assurance, or LOAs, to enforce their patent policy?

19 A Yes, it did.

20 Q And what was the basic process to get an LOA
21 from either a member or a third party?

22 A Well, it requested from all of the
23 participating members an LOA that stated their IP
24 position. And if there was any patents that may apply
25 from nonmembers, there were letters sent out to those

1 companies requesting some --

2 Q Okay. And what were the third-party companies
3 asked to do with their letters of assurance?

4 A Well, there are three possible positions. One
5 is agree to license on a royalty-free basis; the second
6 was to license on a reasonable and nondiscriminatory
7 basis, or RAND; and the third one is they don't agree to
8 license.

9 Q Okay. Were you directed to follow a policy if
10 a third party didn't sign a letter of assurance?

11 A Yes.

12 Q What was it?

13 A Well, let's see. As long as they agreed to
14 license it on a free or reasonable and nondiscriminatory
15 basis, we could consider it for the -- for the standard.
16 But if they did not agree, we were not allowed to use
17 non-licensed technology, and we had to find alternative
18 methods to accomplish it that was either royalty free or
19 reasonable and nondiscriminatory.

20 Q Was it the practice of 802.11 to evaluate
21 proposals, to favor proposals that did not contain
22 patented technology?

23 A Yes. We preferred non-patented technology
24 that wouldn't infringe on any patents. We also
25 preferred zero-royalty patents, because we're trying to

1 get the lowest possible cost for the end users. That
2 would stimulate the market. That would create the
3 biggest volume possible for everybody's benefit.

4 Q Okay. So if a third party said I have a
5 patent, I think that it's necessary to practice the
6 standard, did the IEEE, when they saw that in the
7 letter, do anything to verify the accuracy of that
8 claim? In other words, did they make a determination of
9 whether the standard would infringe on that patent?

10 A No, they don't.

11 Q Do they make any determination or study of
12 whether that patent is valid?

13 A No, they don't.

14 Q And did the IEEE make a list of the people who
15 signed the letter of assurance?

16 A Yes, they did.

17 Q Does presence on that list indicate that the
18 IEEE has either done an infringement or an invalidity
19 analysis?

20 A No.

21 Q Okay. Now, the 802.11a standard is a standard
22 for what? Is it a specification for a product?

23 A 802.11a is a physical layer extension to the
24 5.2 gigahertz band.

25 Q Is there a target in mind for the committee

1 members? Is there a target for a specification for a
2 chip or product, what?

3 A We are primarily targeting from, an
4 implementation standpoint, a chip in which the RF and
5 digital functions would be implemented, that's correct.

6 Q Did the committee members discuss what type of
7 cost targets were involved for an 802.11a chip?

8 A It was generally understood that cost targets
9 and volume for these chips, chipsets, would be in the
10 five to ten dollar range.

11 Q During the 802.11a proceedings, what did the
12 committee consider a reasonable royalty?

13 A Well, I would have to say based on the
14 discussions we had, that it would be in a small
15 percentage of the cost of the ASIC.

16 Q So did the target price of the chipset, you
17 say this five to ten dollars, have any impact on what
18 was a reasonable royalty?

19 A Yes. So if you take a few percent of five
20 dollars, that would put it in the region of five cents.

21 Q Okay. Have you ever heard of a gentleman
22 named Camilla Farerra (phonetics)?

23 A Yes.

24 Q Who is Camilla Farerra?

25 A He was a professor from U.C. Davis who had

1 attended the 802.11 meetings, the original 802.11
2 meetings.

3 Q Okay. What did the group learn about
4 Mr. Farerra as it relates to 802.11?

5 A Well, he had a patented modulation technique
6 that he was trying to get the group to adopt.

7 Q Okay. Did the group consider the merits of
8 his technology?

9 A We did, but outside the meetings, he had also
10 distributed a statement that he would be willing to
11 license his technology for 10 cents per unit.

12 Q And what was the group's response?

13 A Well, we all felt that it was an unreasonable
14 cost for the -- the benefits that he was proposing.

15 Q And was that in keeping with the target price
16 of the five to ten dollars a chip?

17 A Well, it --

18 Q Or maybe you should just explain why.

19 A So basically we look at, you know, what --
20 what it achieves versus what it costs. And for the
21 benefits, we could find alternative technologies that
22 did not have any licensing fees, and so we would always
23 prefer zero-royalty approaches.

24 Q Okay. So did the committee use Farerra's
25 approach?

1 A No. We rejected it.

2 Q Did they use a different approach?

3 A Yes, we did.

4 Q Did they use an approach that had a 10 percent
5 royalty?

6 A No.

7 Q Did they use one that had any royalty?

8 A No, we didn't.

9 Q It was royalty free?

10 A Yes.

11 Q Okay. So even a 10-cent per unit, or chip,
12 royalty was viewed as unreasonable by the committee
13 where they had readily available alternatives to solve
14 the same problem?

15 A Right. The basic costs do get multiplied.

16 Q Now I'll take you to a different situation.

17 The Lucent proposal, which was eventually the
18 winner of the standard, during the process and before
19 the 75 percent vote, were there any IP issues or
20 controversies with respect to Lucent and its proposal?

21 A Yes, there was.

22 Q Can you tell us the controversy.

23 A Well, they had submitted an LOA stating that
24 they were willing to license on a five percent of the
25 product, but that was too ambiguous for us to -- to

1 accept.

2 Q Okay. So what did the committee do about it?

3 A So we had a series of questions related to
4 that, and he answered that.

5 Q Did you convene a meeting of the IEEE with the
6 members?

7 A That was part of the meeting, yes.

8 Q And was Lucent present to answer those
9 questions?

10 A Yes. Bruce Tuch from the Netherlands office
11 was the representative from Lucent.

12 Q And did the committee members question
13 Mr. Tuch about the five percent royalty that he had
14 indicated in that letter?

15 A Yes, we did.

16 Q And what was -- what were the questions?

17 A Well, primarily, you know, what the five
18 percent applied to is the first question. And he
19 clarified that it would be five percent of the chip,
20 which if you assume that it's a five dollar chip in
21 volume, would mean about 25 cents.

22 Q Okay. That's what you inferred from five
23 percent of the chip?

24 A Right.

25 Q All right. And was that understood by the

1 rest of the committee?

2 A Yes.

3 Q Okay. Now, did the suggestion by Mr. Tuch
4 that Lucent was going to charge a 25 cent royalty on a
5 five dollar chip, if it became the standard-bearer, did
6 that gain any resistance from the group during that
7 meeting?

8 A Yes. It only partially addressed the issues.

9 Q What was the other issue expressed by the
10 members to Lucent about its patent issue?

11 MR. FURNISS: This calls for hearsay,
12 Your Honor.

13 THE COURT: Repeat the question, please.

14 Q (By Mr. Vasquez) What was the question
15 expressed at the meeting by the group that was not
16 related to the 25 cents and the five percent issue? You
17 said there was a second question that they asked for
18 clarification on.

19 A Yes.

20 THE COURT: Overruled. Go ahead.

21 A Okay. Basically 25 cents is still a large
22 additional cost on a chip. I mean, these chips are
23 selling for five dollars, but their product cost is much
24 lower than that, typically, less than half of that.

25 So what they were concerned about was whether

1 everyone, all the companies, had to pay that particular
2 fee, or if it was an implementation patent versus an
3 essential patent.

4 Q (By Mr. Vasquez) Okay. So let me take that --
5 really two pieces there I want to inquire about.

6 So you said on a five dollar chip, there's the
7 cost of the chip. That's the sales price, right, five
8 dollars?

9 A That's the sales price to a box builder like
10 Netgear or 3Com.

11 Q So the seller in your example, at five
12 dollars, would be somebody like who?

13 A The seller?

14 Q The seller of that chip for five dollars.

15 A Yeah, that would be like Intersil, Lucent,
16 Atheros.

17 Q And the buyer of that chip is going to be like
18 Netgear and 3Com?

19 A Right.

20 Q So when Intersil or Atheros sell a five-dollar
21 chip to Netgear, you say their cost would be much lower
22 than five dollars?

23 A Yeah. It would have to be in order to cover
24 their engineering cost and overhead. And they have to
25 make at least some profit.

1 Q And the 25 cents would really be more
2 appropriately compared to a product costing 5.50?

3 A Right.

4 Q And the 25 cents compared to the 2.50 overall
5 cost, in your view, is --

6 A That's still a fairly large amount.

7 Q Okay. And was that the expression that you
8 heard in the room that led to the questions to Bruce
9 Tuch?

10 A Yes.

11 Q Okay. Now, what did Bruce Tuch say to address
12 the concerns about whether they'd have to pay the 25
13 cents, which might be too high?

14 A Right. Well, he further clarified their
15 position, that the five percent was a license fee on
16 their technology. So basically if you wanted to use
17 their implementation, that you would be able to pay them
18 that amount, but that the IP royalty was much, much less
19 and basically didn't really apply. It wasn't necessary
20 to implement the same.

21 Q So I saw in the minutes the phrase "an
22 essential patent versus an implementation patent." Are
23 you familiar with those terms?

24 A Yes, I am.

25 Q Okay. So what's an essential patent?

1 A An essential patent is one that is required to
2 implement a compliant device, as opposed to the
3 implementation patent is a particular way of designing
4 something to meet that device, but there are other ways.

5 Q Was Lucent asked, "Are your patents
6 implementation or are they essential?"

7 A Yes.

8 Q And what was their response?

9 A The answer came out that their patents were
10 essentially implementation patents.

11 Q So where did that leave this potential 25 cent
12 royalty from Lucent, the proposer of the standard?

13 A Well, as long as a chip company was able to
14 design their own circuits that didn't infringe upon
15 their patents, that they did not have to pay the five
16 percent of that chip cost.

17 Q After Mr. Tuch's explanation of Lucent's
18 patent policy as regards the 802.11a in this particular
19 proposal on the patents, did the committee have further
20 questions on that?

21 A Nothing significant.

22 Q Did they appear satisfied?

23 A Yes.

24 Q Was Lucent's clarified patent position
25 consistent with those who had made proposals and agreed

1 not to charge a royalty?

2 A At that point, yes.

3 Q And why is that?

4 A Because essentially if you designed your own
5 implementation and avoided their -- their implementation
6 patents, you were royalty free, which is as good as it
7 will get to get a low-cost solution.

8 Q And I want to talk to you about a different
9 situation. You heard of the RSA patent in connection
10 with 802.11?

11 A Yes, I have.

12 Q What is an RSA patent?

13 A The RSA had a security mechanism which the
14 IEEE 802.11 considered to address a hole in the
15 standard, which is the inability to block eavesdropping
16 or intrusion. So we had to have some solution. And RSA
17 was one of the possible solutions for that.

18 Q Was RSA's solution or invention, did it deal
19 with important aspects of 802.11, the security issue?

20 A Yes, it was.

21 Q What was the important security issue that was
22 involved through the RSA solution?

23 A We had some means to block at least casual
24 eavesdropping and intrusion.

25 Q Okay. So was that an important part to the

1 industry when they sell these devices?

2 A Yes, it was. It was necessary.

3 Q Okay. Was there some indication that without
4 it, there might be a suffering of sales or a lack of an
5 adoption?

6 A Yes, because our customers at the time were
7 large companies, and they couldn't afford large security
8 holes.

9 Q Let me direct your attention to Exhibit 853,
10 please.

11 Now, is 853 the license cost for the RSA
12 solution?

13 A Yes, it was.

14 Q Okay. And what was the rate if one wanted to
15 acquire the RSA solution proposed into the 802.11
16 solution?

17 A Well, there are several tiers, but for most of
18 the chip companies, who basically count on making
19 millions of chips to become profitable, they would take
20 out the one-time licensing fee of \$125,000.

21 Q Okay. And what did that equate to in cents
22 per unit?

23 A Well, if you amortize it over two million
24 units, it would about six cents per unit. If you built
25 ten million units, it would end up being

1 one-and-a-quarter penny.

2 Q Would the major suppliers of this product be
3 licensing at that level likely?

4 A Yes.

5 Q Okay. Now, Radiata, I mentioned that company
6 before. Have you ever met anyone at Radiata?

7 A Yes, I have.

8 Q Okay. Who?

9 A I met David Skellern, their president who
10 attended the 802.11a meetings.

11 Q Okay. The company that you were working for
12 at the time of these meetings was Symbol Technology,
13 correct?

14 A Yes, it was.

15 Q And you said they built -- what product did
16 they sell?

17 A Well, at the time we did our own baseband
18 chips and the full radio modules as well as the end
19 products that it would go into.

20 Q Were they intending to be a purchaser of
21 802.11 chipsets when they participated in the standard?

22 A Yes. We were not intending to build our own
23 next generation chips for 802.11a.

24 Q So would you call that the same tier of
25 commerce or a different one to Netgear and its

1 competitors?

2 A It would be similar to the Netgear.

3 Q Who was the biggest competitor in that tier of
4 commerce?

5 A It was Cisco, in the wireless area.

6 Q Now, a company at that level of commerce, what
7 do they do to decide which vendor of chips they're going
8 to do business with for the succeeding years once the
9 standard is made?

10 A Could you repeat that question?

11 Q Yes. Is there a process where a company like
12 Symbol goes out and decides what chip to buy, whether
13 it's a Atheros, Intersil, Lucent?

14 A Yes. We have a selection process. We look at
15 the potential vendors for the chips, and we will have
16 talks with them or visit them and evaluate their
17 capabilities.

18 Q Okay. Did Symbol undertake an evaluation of
19 the chip companies that said they were going to go into
20 the 802.11a market?

21 A Yes. We did visit them in Australia.

22 Q You visited who in Australia?

23 A We visited Radiata in Australia.

24 Q Did you get an invitation from Mr. Skellern?

25 A Yes, we did.

1 Q And what was the purpose of that visit?

2 A Well, to evaluate their technical capabilities
3 and the likelihood that they can produce the chip in
4 that timeframe that they were planning that would meet
5 our requirements.

6 Q Did you go down there with an idea that if
7 they checked out, as good as Mr. Skellern said they were
8 going to be, that you would enter into business with
9 them and buy their chips?

10 A Yes. That was a definite possibility.

11 Q What happened when you evaluated their chips?

12 A Well, we evaluated their team as well as the
13 design they were working on.

14 But upon questioning, it became apparent that
15 it did not have the seasoned experience required to
16 develop a good working chip through all of the
17 manufacturing process variations and all of that.
18 They -- they didn't have any understanding of what
19 offsets were at the time. And that was a shock to us,
20 that they hadn't planned in on compensating for those,
21 because that's a major part of RF design.

22 Q Did that cause Symbol to lose confidence in
23 Radiata as a potential chip supplier?

24 A Yes. That is what we reported back to both
25 the Symbol executive team as well as what we had told

1 Radiata.

2 Q Okay. Did Symbol go with Radiata or another
3 chip vendor to purchase its 802.11a chip supply?

4 A Well, we eventually went with somebody else.

5 Q And did Symbol ever hear that Radiata was
6 subsequently purchased, after your visit, by Cisco?

7 A Yes, we did.

8 Q What was your reaction?

9 A Well, actually, at the time we were very
10 happy.

11 Q Why?

12 A Because based on our experience, we thought
13 that Cisco would end up wasting quite a bit of time
14 trying to get that design to work and that would be an
15 advantage to us, because they were our biggest
16 competitor.

17 Q Okay. If CSIRO had done what Mr. Farerra did
18 and Bruce Tuch did, send you a price list on what they
19 intended to charge for their patents, and on their price
20 list it said two to four dollars, what would have
21 happened in the 802.11a committee with the Lucent
22 proposal that proposed the OFDM solution?

23 A Well, two to four dollars would have been a
24 nonstarter. We would have rejected that one and gone
25 with a different approach.

1 Q And why do you say that?

2 A You can look at our history. I mean, even at
3 25 cents, we were pretty much up in arms and trying to
4 look for ways that it was much less than that. For four
5 dollars, two dollars, that's way beyond even the cost of
6 the basic chip. We're talking about chips that would
7 end up costing 2.50.

8 Q And am I correct in recalling that
9 Dr. Farerra's 10 cents caused a similar reaction?

10 A Yes.

11 Q Okay. And were there other alternatives on
12 this six-pack of the American Idol contestants?

13 A Well, the BreezeCom/NEC proposal was very much
14 in contention. And in the first round, it actually had
15 more votes than the OFDM. And even in the second vote,
16 it was a close second.

17 Q Did anyone think that alternative
18 technologies, the single-carrier from BreezeCom,
19 wouldn't have worked as an 802.11a solution, and it
20 wouldn't have given manufacturers of laptops and devices
21 equivalent or --

22 A No, not at all. There was more comfort with
23 the single-carrier approach at that time, because most
24 of the previous solutions were single carrier.

25 Q What had the single-carrier patent positions

1 been expressed as being?

2 A Zero. BreezeCom said they had no patents on
3 it.

4 MR. VASQUEZ: No further questions.
5 Thank you.

6 THE COURT: All right.
7 Cross-examination.

8 MR. FURNISS: Thank you.

9 CROSS-EXAMINATION

10 BY MR. FURNISS:

11 Q Good evening, Mr. Kawaguchi.

12 A Good evening.

13 Q I'm Dan Furniss. I represent CSIRO.

14 First of all, do you recall giving your
15 deposition in this case?

16 A Yes, I do.

17 Q And you were asked whether CSIRO provided a
18 letter in the form requested by the IEEE?

19 A Yes, I believe I was asked that.

20 Q And you recognize that they had provided a
21 letter in the form suggested by the IEEE; isn't that
22 right?

23 A It was submitted.

24 Q And it was unaltered from the form that the
25 IEEE had sent?

1 A Yes. It didn't come to my attention. It
2 wasn't a notable presentation there was any proposals
3 from them, so everybody submitted IP statements, whether
4 they were actively involved or not.

5 Q And those statements were read at the
6 beginning -- if they were received, they were read at
7 the beginning of the meetings, were they not?

8 A Yes.

9 Q And were you on the committee in December of
10 1998?

11 A Yes, I believe I was.

12 Q And you don't recall the CSIRO letter being
13 read?

14 A No, unfortunately, I don't.

15 Q Now, with regard to the question of royalties
16 on particular technologies, does the amount of royalty
17 have to be reasonable?

18 A Yes.

19 Q And does the IEEE take any position on what's
20 a reasonable royalty?

21 A Well, from the committee standpoint we do.

22 Q Does the IEEE officially or in writing take
23 any position on what's a reasonable royalty?

24 A We leave it to the judgment of the voter,
25 which are each of us, and we each have our own concept

1 of what reasonable is.

2 Q And you each have your own concept of what
3 reasonable is; is that right?

4 A That's correct.

5 Q And did anyone contact CSIRO and ask them what
6 their concept of reasonable was?

7 A Not that I know.

8 Q Now, if a party disagrees about what a
9 reasonable royalty is, can they negotiate with one
10 another?

11 A Yes, I suppose they could negotiate.

12 Q Do you know any of the history and
13 negotiations of this particular patent?

14 A Not of this one.

15 Q Do you expect patentholders who list their
16 patents on the IEEE website to automatically license
17 their patent at zero?

18 A No.

19 Q So the position that was taken by the members
20 or companies who were part of the IEEE that the
21 reasonable royalty for the patent-in-suit here was zero,
22 you wouldn't necessarily agree with that, would you?

23 A Could you repeat that question, please?

24 Q If the position of any particular person,
25 hypothetical person, let's say, that CSIRO should

1 license -- having given the letter that said they charge
2 reasonable royalties, if the position was zero, would
3 you think that that was a reasonable position for a
4 company to take?

5 A No, but it would affect our voting.

6 Q Well, before the 802.11 standard was ratified,
7 the IEEE was aware of CSIRO's patent; isn't that right?

8 A I would believe that if they submitted it by
9 December '98, that it would have been in there, and it
10 wasn't brought out.

11 Q And the companies that make up the IEEE
12 include many, many large companies; isn't that right?

13 A That's right.

14 Q And they have staffs that could take a quick
15 look at patents very easily, couldn't they?

16 A That is questionable.

17 Q Well, let's take Intel, for example, do they
18 have a patent department?

19 A I believe they do.

20 Q And they have a lot of competent people,
21 engineers and lawyers; isn't that right?

22 A I suppose they do.

23 Q And they could take a look at a patent and --
24 strike that.

25 It's true that a lot of those patents, when

1 you look at them, you can quickly conclude that they're
2 not relevant to a particular standard; isn't that true?

3 A Some.

4 Q And there's others where you say, well, this
5 one has to be checked out; isn't that right?

6 A Yes.

7 Q And these big companies have plenty of staff
8 that could easily do that initial cut and figure out
9 whose patent might be relevant or might not; isn't that
10 true?

11 A I know of a case where it wasn't true.

12 Q Well, I'm talking -- I'm talking about this
13 case, okay?

14 A Yes. But you're asking me if that is true,
15 and to my knowledge it is not.

16 Q Well, it's not the responsibility of the IEEE
17 to watch out for patents, right?

18 A That's correct.

19 Q But any of the individual companies could
20 easily do their own analysis to begin with and if they
21 saw a problem or a potential problem they could pursue
22 it further; isn't that right?

23 A If they choose to, but some companies choose
24 not to.

25 Q Well, David Skellern was -- you met Skellern,

1 right?

2 A Yes, I did.

3 Q And he chaired some of the meetings or
4 subcommittee meetings, didn't he?

5 A I'm not sure.

6 Q When he went down to Australia, did you learn
7 that they had obtained the technology from CSIRO that
8 underlied Radiata?

9 A Not to my knowledge.

10 Q You didn't know that?

11 A No.

12 Q Now, are you aware of whether anybody ever
13 contacted CSIRO and said, "We're thinking of using your
14 technology in the standard, would you like to talk to us
15 about royalties"?

16 A No, not to my knowledge.

17 Q Do you have any reason to believe that that
18 had not happened, that CSIRO would not have engaged with
19 the committee and told them their views and negotiated
20 with them a reasonable royalty?

21 A What was the question?

22 Q Is there any reason to believe that if someone
23 had contacted CSIRO that you wouldn't have learned their
24 views in the patent and had an opportunity to talk to
25 them the way you did with RSA, for example, about what a

1 reasonable royalty was?

2 A Possibly, but it didn't happen.

3 Q That's right, it didn't happen, because no one
4 took the time to even look at the patent; isn't that
5 right?

6 A I don't know if anybody was aware of the
7 patent.

8 Q Well, it was on the website about eight months
9 before 802.11a was ratified, right?

10 A There are many statements on that website.

11 Q Well, if somebody is not going to look at the
12 statements, what's the purpose of having them?

13 A A volunteer organization, if nobody looks at
14 it, that particular one --

15 Q You don't look, you proceed at your own risk;
16 isn't that right?

17 A Well, it is a best effort standard which we
18 try to do everything we can.

19 Q Well, looking at a patent, everything you can
20 means not looking at any of the patents?

21 A Well, it's like saying do we look at every
22 single patent that exists that might apply. I mean,
23 that's one of them.

24 Q Well, at that point in time someone could have
25 taken a quick look at the patents and figured out which

1 ones might be relevant; isn't that true?

2 A Possibly.

3 Q And no one did?

4 A Apparently.

5 Q Do you think it's reasonable to attempt to
6 negotiate either a royalty arrangement or a partnership
7 arrangement or other kinds of arrangements between a
8 patentholder and technology company; is that a
9 reasonable thing to do?

10 A It is one possible approach.

11 Q Now, this consensus of the committees, is it
12 written down anywhere?

13 A Yes.

14 Q Where?

15 A In the minutes.

16 Q With specific rates?

17 A Well, with regard to the discussion for Lucent
18 which talked about five percent of the chip and our
19 understanding of what chip costs were, there was a
20 discussion that was recorded in the minutes.

21 Q That's because of proposing the standard was
22 Mr. Tuch, right?

23 A That's right.

24 Q And that wouldn't apply to anybody else who
25 wasn't proposing a standard, those six companies were

1 the only ones that would have been asked or even could
2 have been asked; isn't that right?

3 A Yes.

4 Q And so if you weren't a proponent -- I mean,
5 do you think the patents are limited solely to people
6 who are proposing proposals?

7 A No.

8 Q And you don't even know right now whether
9 there are or not other patents that apply to the 802.11a
10 standard; isn't that right?

11 A That's correct.

12 Q And the same thing, were you on the committee
13 when the "g" standard was adopted, ratified?

14 A I was not. I only attended the first few
15 minutes.

16 Q When you were with Symbol Technologies, did
17 they get into a lawsuit with Proxim?

18 A Yes, they did.

19 Q And what royalty rate did they seek?

20 A I have no idea.

21 Q Isn't it a fact they sought 12 percent of
22 finished products in Proxim?

23 A I am not aware of the particulars of that
24 lawsuit.

25 Q Symbol recovered in that case, didn't they?

1 A I believe they got a judgment. I'm not sure
2 what they recovered.

3 MR. FURNISS: Thank you, Mr. Kawaguchi.
4 That's all I have.

5 THE COURT: Any redirect?

6 MR. VASQUEZ: No, Your Honor.

7 THE COURT: May this witness be excused?

8 MR. FURNISS: Yes, Your Honor.

9 THE COURT: You are excused and thank you
10 for coming.

11 All right. Do we have any other RAND
12 witnesses this afternoon?

13 MR. MIKE JONES: No, Your Honor.

14 THE COURT: All right. Anything else the
15 Court needs to take up before the jury returns in the
16 morning?

17 MR. VAN NEST: Your Honor, I don't think
18 so. We're going to file our brief at seven, is that
19 what we're planning to do, on claim construction?

20 THE COURT: 7:00 p.m., yes.

21 MR. VAN NEST: 7:00 p.m. And I believe
22 Your Honor already knows we have a RAND witness tomorrow
23 in the afternoon.

24 THE COURT: Right. How long will that
25 witness be?

1 THE WITNESS: We have an expert 40
2 minutes and a 15- minute percipient -- I'm sorry, two
3 15-minute percipients and one expert 35, 40.

4 MR. FURNISS: And Your Honor, we're going
5 to put on our defense witnesses to the equitable
6 defenses when the defendants have rested on that.

7 MR. VASQUEZ: You have two witnesses on
8 your list?

9 MR. FURNISS: Three.

10 MR. VASQUEZ: What's the time?

11 THE COURT: Y'all get together and meet
12 and confer on that.

13 MR. VAN NEST: Just for our planning,
14 though, Your Honor, we're planning to put on three
15 witnesses. Is Your Honor expecting the entire RAND case
16 to be finished tomorrow night, is that what -- or do you
17 care?

18 THE COURT: I don't care. I mean, I want
19 it finished by the time we're through with the jury
20 trial and I've got Friday afternoon open, so I would say
21 fill it up if you need to.

22 MR. LAM: Defendants still have the
23 motion to exclude their damages expert, Mike Wagner,
24 from the jury trial, that's pending.

25 THE COURT: Yes. That's denied.

1 MR. LAM: Your Honor, may I be heard on a
2 follow-up issue regarding that?

3 THE COURT: All right.

4 MR. LAM: I've had a chance to go through
5 the exhibits that CSIRO tends to offer through
6 Mr. Wagner, and if I could just show Your Honor this
7 kind of example of the can of worms that Mr. Wagner
8 would open up at the jury trial.

9 This is an ABI market research that talks
10 about WiFi integrated circuit chip prices, revenues and
11 average selling prices.

12 We had withdrawn a host of ABI market
13 research materials in response to their objections.
14 They now, intend, I suppose, to offer one through
15 Mr. Wagner. Truth be told, this document is not all
16 that bad for defendants, as it shows average selling
17 prices of WiFi ICCs, integrated circuit chips, ranging
18 from \$3.40 to \$11.51 in 2008 and he's the same guy who
19 is their damages expert saying that Intel owes \$5.

20 THE COURT: Okay. It will be great for
21 cross-examination then.

22 MR. LAM: We think this is an irrelevant
23 side show.

24 MR. GILCHRIST: Just to be clear, Your
25 Honor, what Mr. Wagner was going to do was simply

1 prepare a slide from that document showing only the
2 sales volumes which were within the motion in limine.
3 We're not planning on introducing the exhibit. I think
4 he may have gotten that idea because he put the source
5 on the slide we sent over. But we're not planning on
6 introducing that exhibit. If we said we were, I
7 apologize.

8 THE COURT: Okay. Anything further?

9 MR. LAM: No.

10 MR. VAN NEST: Your Honor, what time did
11 you indicate to the jurors they should return?

12 THE COURT: Nine o'clock.

13 MR. VAN NEST: 9:00 a.m.

14 And I would like to see lead counsel in
15 chambers, please.

16

17

18

19

20

21

22

23

24

25

REPORTER'S CERTIFICATE

We certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. Dated at Tyler, Texas, this the 16th day of April, 2009.

D. KEITH JOHNSON, RDR, CRR

KIMBERLY J. JULIAN, RPR, CRR